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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/923,877 | 08/06/2001 | Wen-Tsang Liu | DF-00200 | 9754 |

28960 7590 08/13/2003
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EXAMINER

BERCK, KENNETH A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2879

DATE MAILED: 08/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/923,877

Applicant(s)

WEN-TSANG LIU

Examiner

Ken A Berck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jeong (US 5,329,203) in view of Hasegawa (US 5461279).

Regarding claim 9, Jeong discloses (fig 4) a cold cathode fluorescent flat lamp with an enclosure chamber sealed by two plates (1,2) containing gas, an anode and a cathode disposed in the chamber with the cathode parallel to the anode, an auxiliary anode (6) disposed between the anode and cathode attached to a surface of either plate.

Jeong fails to clearly point out the auxiliary anode attached to the outer surface of the glass plate, being parallel to the cathode and a circuit board.

Hasegawa discloses (fig 1) the auxiliary anode (18) disposed between the anode and cathode attached to the outer surface of a plate and parallel to the cathode in order to facilitate initiation of discharge across the electrodes.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lamp of Jeong with the auxiliary anode (18) disposed between the anode and cathode attached to the outer surface of a plate and parallel to

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the cathode in order to facilitate initiation of discharge across the electrodes, as taught by Hasegawa.

Claims 1, 4-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeong (US 5,329,203) in view of Hasegawa (US 5,461,279), Okamoto et al. (US 6,040,973).

Regarding claim 1, Jeong discloses (fig 4) a cold cathode fluorescent flat lamp with an enclosure chamber sealed by two plates (1,2) containing gas, an anode and a cathode disposed in the chamber with the cathode parallel to the anode, an auxiliary anode (6) disposed between the anode and cathode attached to a surface of either plate.

Jeong fails to clearly point out the auxiliary anode attached to the outer surface of the glass plate, being parallel to the cathode and a circuit board.

Hasegawa discloses (fig 1) the auxiliary anode (18) disposed between the anode and cathode attached to the outer surface of a plate and parallel to the cathode in order to facilitate initiation of discharge across the electrodes.

Hasegawa fails to clearly point out a circuit board.

Okamoto discloses (fig 9) an auxiliary anode parallel to the cathode in order to control emission and a circuit board in order to control the voltage to the electrodes.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lamp of Jeong with the auxiliary anode (18) disposed between the anode and cathode attached to the outer surface of a plate and parallel to the cathode in order to facilitate initiation of discharge across the electrodes, as taught

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by Hasegawa and the auxiliary anode parallel to the cathode in order to control emission and a circuit board in order to control the voltage to the electrodes, as taught by Okamoto.

Regarding claim 4, Jeong discloses all of the above claim limitations, but fails to clearly point out the gas being an inert or mercury gas.

Hasegawa discloses (column 2, lines 48-67) the gas being an inert or mercury gas in order to maintain a discharge.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lamp of Jeong with the auxiliary anode (18) disposed between the anode and cathode attached to the outer surface of a plate and parallel to the cathode in order to facilitate initiation of discharge across the electrodes and with the gas being an inert or mercury gas in order to maintain a discharge, as taught by Hasegawa and the auxiliary anode parallel to the cathode in order to control emission and a circuit board in order to control the voltage to the electrodes, as taught by Okamoto.

Regarding claim 5-6, Jeong discloses all of the above claim limitations, but fails to clearly point out the gas being an inert gas of argon ranged from 3 to 200 torr.

Hasegawa discloses (column 2, lines 48-67) the gas being an inert gas of argon ranged from 3 to 200 torr in order to maintain a discharge.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lamp of Jeong with the gas being an inert gas of

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argon ranged from 3 to 200 torr in order to maintain a discharge, as taught by Hasegawa.

Regarding claim 8, Jeong discloses a fluorescent substance coated on each surface of the plates.

Claims 2-3, 7 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeong (US 5,329,203) in view of Hasegawa (US 5461279), Okamoto et al. (US 6,040,973) and Yamano et al. (US 4767965).

Regarding claims 2-3, Jeong, Hasegawa and Okamoto disclose all of the above claim limitations but fail to clearly point out using nickel.

Yamano discloses the electrodes being made of nickel, and the gas being an inert gas or mercury gas at a pressure from 3 to 200 torr in order to discharge electrodes without heating.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lamp of Jeong with the auxiliary anode (18) disposed between the anode and cathode attached to the outer surface of a plate and parallel to the cathode in order to facilitate initiation of discharge across the electrodes, as taught by Hasegawa, the auxiliary anode parallel to the cathode in order to control emission and a circuit board in order to control the voltage to the electrodes, as taught by Okamoto and the electrodes being made of nickel, and the gas being an inert gas or mercury gas at a pressure from 3 to 200 torr in order to discharge electrodes without heating, as taught by Yamano.

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Regarding claims 7, Jeong, Hasegawa and Okamoto disclose all of the above claim limitations but fail to clearly point out using nickel.

Yamano discloses the electrodes being made of nickel, and the gas being an inert gas or mercury gas at a pressure from 3 to 200 torr in order to discharge electrodes without heating.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lamp of Jeong with the auxiliary anode (18) disposed between the anode and cathode attached to the outer surface of a plate and parallel to the cathode in order to facilitate initiation of discharge across the electrodes, as taught by Hasegawa, the auxiliary anode parallel to the cathode in order to control emission and a circuit board in order to control the voltage to the electrodes, as taught by Okamoto and the electrodes being made of nickel, and the gas being an inert gas or mercury gas at a pressure from 3 to 200 torr in order to discharge electrodes without heating, as taught by Yamano.

Regarding claims 10-12, Jeong, Hasegawa and Okamoto disclose all of the above claim limitations but fail to clearly point out using nickel.

Yamano discloses the electrodes being made of nickel, and the gas being an inert gas or mercury gas at a pressure from 3 to 200 torr in order to discharge electrodes without heating.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the lamp of Jeong with the auxiliary anode (18) disposed between the anode and cathode attached to the outer surface of a plate and parallel to

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the cathode in order to facilitate initiation of discharge across the electrodes, as taught by Hasegawa, the auxiliary anode parallel to the cathode in order to control emission and a circuit board in order to control the voltage to the electrodes, as taught by Okamoto and the electrodes being made of nickel, and the gas being an inert gas or mercury gas at a pressure from 3 to 200 torr in order to discharge electrodes without heating, as taught by Yamano.

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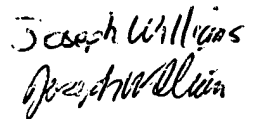
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken A Berck whose telephone number is (703)305-7984. The examiner can normally be reached on Mon-Fri 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703)305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7382 for regular communications and (703)308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

kab 
August 8, 2003


Joseph Williams